March 14, 2012
Project No. 603668001

Mr. Abdul Rashid, PE, CFM
City of Casa Grande
3181 North Lear Avenue
Casa Grande, Arizona 85222

Subject: Addendum No. 1 to *Geotechnical Evaluation for Landfill Scale and Scalehouse Northwest Corner of Interstate 8 and Chuichu Road,* Dated December 16, 2011. Casa Grande, Arizona

Dear Mr. Rashid:

Pursuant to your request, we have prepared an addendum letter to our Geotechnical Evaluation Report dated December 16, 2011, to address questions regarding our geotechnical recommendations. The questions and responses are provided below.

**Question 1: What kind of engineered soil the contractor needs to mix for the 3' down excavation or what the pad consistency needs to be?**

We recommend that the engineered fill exhibit a Plasticity Index (PI) of less than 20, and an Expansive Index (EI) of less than 50. The fill soils should be free of non-soil and deleterious material (e.g. organic material, trash, etc.), particles larger than 3 inches in diameter should be removed from the soil. The engineered fill should be moisture-conditioned and compacted per our specifications in our letter dated December 16, 2011.

**Question 2: The geotechnical report call calls for a 3' engineered fill which seems to be a bit over design for a manufactures scalehouse, please clarify the need.**

Due to the scale house and scale being sensitive to settlement, we recommended the overexcavation to help mitigate settlement for the structures. In addition, the project site is a landfill where placement of the material may not have been performed in a moisture-conditioned and compacted manner. Our borings did not extend through the fill material into native soils at

the site. Because of the unknown compactive effort of the placed fill and the potential for buried debris in the subsurface, additional settlement may occur.

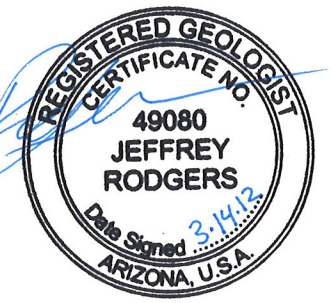
**Question 3: The foundations of the scalehouse and future scale are next to each other. Due to budgeting issues, the City is proceeding with the scalehouse now and would construct the scale in the future. What precautions need to be taken while preparing foundation of the scale in future times? Is it beneficial to build the foundation of the scale now along with the foundation of the scalehouse?**

We recommend that footings for both the scale house and the scale be at the same bearing elevation. In addition, we recommend that the overexcavation for both foundations be performed simultaneously in order to reduce the potential for post-construction damage to the scale house foundation.

If the overexcavation for the scale is performed at the same time as the scale house foundation, we recommend that the upper 6 inches of the soil be scarified, moisture conditioned, and re-compacted before construction of the scale foundation.

If the foundations for the two structures are at different elevations, we recommend that the scale house foundation be supported by the contractor during construction. This support could include underpinning of the existing foundation, or other adequate methods of support.

Sincerely,
**NINYO & MOORE**

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EXPIRES 12/31/13

JSR/KLP/clj

**EXPIRES: 03/31/15**

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